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# SEARCH REQUEST FORM

Examiner # (Mandatory): 69826 Requester's Full Name: Coate  
Art Unit 1614 Location (Bldg/Room#): CA 12 B07 Phone (circle 305 306 308) 4724  
Serial Number: 591366656 Results Format Preferred (circle): PAPER DISK E-MAIL

Title of Invention \_\_\_\_\_

Inventors (please provide full names): Murray A Johnston

Earliest Priority Date: PCT/US98/02289 2/3/98

Keywords (include any known synonyms registry numbers, explanation of initialisms):

Compound - see attached, claim 1

SCIENTIFIC REFERENCE BR  
Sci. & Tech. Info Cntr

OCT 25

Pat. & T.M. Office

## Search Topic:

Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

Please search

1. Composition comprising above compound
2. method of using compound to stimulate hair growth.

Thanks  
Rebecca

## STAFF USE ONLY

Searcher: K. Fuller  
Searcher Phone #: 302-4290  
Searcher Location: 2331  
Date Picked Up: 10/28/98  
Date Completed: 10/28/98  
Clerical Prep Time: 20  
Terminal Time: 55  
Number of Databases: \_\_\_\_\_

| Type of Search                                    | Vendors (include cost where applicable)                   |
|---|---|
| <input type="checkbox"/> N.A. Sequence            | <input checked="" type="checkbox"/> STN                   |
| <input type="checkbox"/> A.A. Sequence            | <input type="checkbox"/> Questel/Orbit                    |
| <input checked="" type="checkbox"/> Structure (#) | <input type="checkbox"/> Lexis/Nexis                      |
| <input type="checkbox"/> Bibliographic            | <input type="checkbox"/> WWW/Internet                     |
| <input type="checkbox"/> Litigation               | <input type="checkbox"/> In-house sequence systems (list) |
| <input type="checkbox"/> Fulltext                 | <input type="checkbox"/> Dialog                           |
| <input type="checkbox"/> Procurement              | <input type="checkbox"/> Dr. Link                         |
| <input type="checkbox"/> Other                    | <input type="checkbox"/> Westlaw                          |
|   | <input type="checkbox"/> Other (specify)                  |

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:52:30 ON 28 OCT 1999

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FILE COVERS 1967 - 28 Oct 1999 VOL 131 ISS 18

FILE LAST UPDATED: 27 Oct 1999 (19991027/ED)

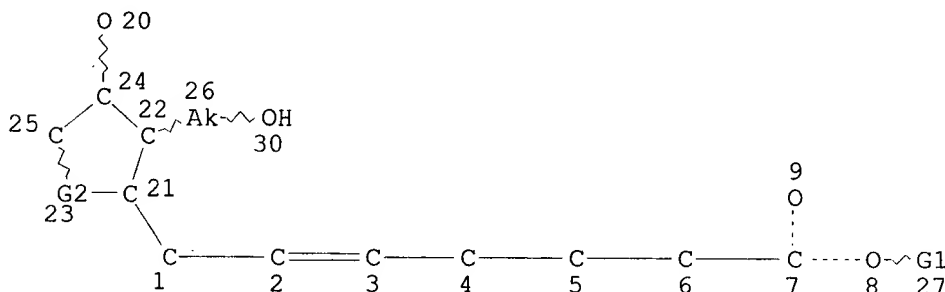
This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> D QUE L24

L19 STR

CH--OH  
@28 29



VAR G1=H/AK

VAR G2=CH/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L22 1804 SEA FILE=REGISTRY SSS FUL L19

L23 15253 SEA FILE=HCAPLUS ABB=ON L22

L24 5 SEA FILE=HCAPLUS ABB=ON L23 AND HAIR

=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 11:52:40 ON 28 OCT 1999

FILE LAST UPDATED: 26 OCT 1999 (19991026/UP). FILE COVERS 1960 TO DATE.

KATHLEEN FULLER STIC LIBRARY 308-4290

*This structure covers derivatives per Claim 1 of PGA, PGF or PGF as well as the more specific PGF<sub>2</sub> in Claim 3*

*1804 structures*

MEDLINE has been reloaded to reflect the annual MeSH changes made by the National Library of Medicine for 1999. Enter HELP RLOAD for details.

OLDMEDLINE, data from 1960 through 1965 from the Cumulated Index Medicus (CIM), has been added to MEDLINE. See HELP CONTENT for details.

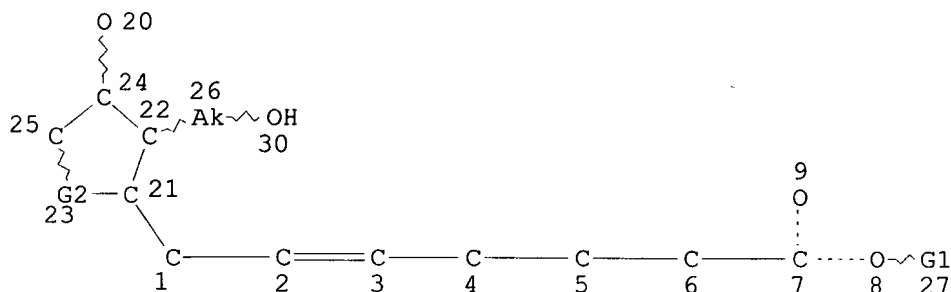
Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> D QUE L27

L19 STR

CH-OH  
@28 29



VAR G1=H/AK

VAR G2=CH/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L22 1804 SEA FILE=REGISTRY SSS FUL L19

L25 7582 SEA FILE=MEDLINE ABB=ON L22

L26 13156 SEA FILE=MEDLINE ABB=ON HAIR+NT/CT

L27 1 SEA FILE=MEDLINE ABB=ON L25 AND L26

=> FILE EMBASE

FILE 'EMBASE' ENTERED AT 11:52:52 ON 28 OCT 1999

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FILE COVERS 1974 TO 21 Oct 1999 (19991021/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L30

L19 STR

KATHLEEN FULLER STIC LIBRARY 308-4290

CH-OH  
@28 29



VAR G1=H/AK

VAR G2=CH/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L22 1804 SEA FILE=REGISTRY SSS FUL L19

L28 15227 SEA FILE=EMBASE ABB=ON L22

L29 6543 SEA FILE=EMBASE ABB=ON HAIR+NT/CT

L30 1 SEA FILE=EMBASE ABB=ON L28 AND L29

=> FILE BIOSIS

FILE 'BIOSIS' ENTERED AT 11:53:10 ON 28 OCT 1999

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FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1969 TO DATE.

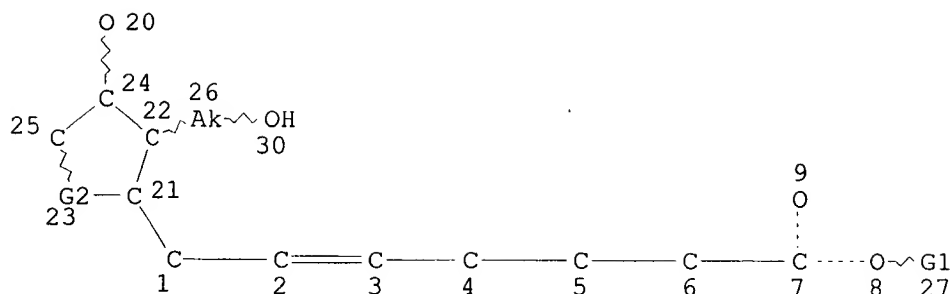
RECORDS LAST ADDED: 26 October 1999 (19991026/ED)

The BIOSIS file has been reloaded. Enter HELP RLOAD and HELP REINDEXING  
for details.

=> D QUE L32

L19 STR

CH-OH  
@28 29



VAR G1=H/AK  
VAR G2=CH/28  
NODE ATTRIBUTES:  
CONNECT IS E1 RC AT 20  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE  
L22 1804 SEA FILE=REGISTRY SSS FUL L19  
L31 13317 SEA FILE=BIOSIS ABB=ON L22  
L32 5 SEA FILE=BIOSIS ABB=ON L31 AND HAIR

=> DUP REM L24 L27 L30 L32  
FILE 'HCAPLUS' ENTERED AT 11:53:32 ON 28 OCT 1999  
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FILE 'MEDLINE' ENTERED AT 11:53:32 ON 28 OCT 1999  
  
FILE 'EMBASE' ENTERED AT 11:53:32 ON 28 OCT 1999  
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FILE 'BIOSIS' ENTERED AT 11:53:32 ON 28 OCT 1999  
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PROCESSING COMPLETED FOR L24  
PROCESSING COMPLETED FOR L27  
PROCESSING COMPLETED FOR L30  
PROCESSING COMPLETED FOR L32  
L37 10 DUP REM L24 L27 L30 L32 (2 DUPLICATES REMOVED)

=> D L37 BIB ABS IND HITSTR  
'HITSTR' IS NOT A VALID FORMAT  
In a multifile environment, a format can only be used if it is valid  
in at least one of the files. Refer to file specific help messages  
or the STNGUIDE file for information on formats available in  
individual files.  
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):0  
'0' IS NOT A VALID FORMAT  
In a multifile environment, a format can only be used if it is valid  
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in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):END

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:54:47 ON 28 OCT 1999

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FILE COVERS 1967 - 28 Oct 1999 VOL 131 ISS 18

FILE LAST UPDATED: 27 Oct 1999 (19991027/ED)

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=> D QUE L24 1-5 ALL HITSTR

'1-5' IS NOT VALID HERE

For an explanation, enter "HELP DISPLAY QUERY".

=> D L24 1-5 ALL HITSTR

L24 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:440915 HCAPLUS

DN 127:117499

TI A comparison of two methods of estrous synchronization of hair sheep in th tropics

AU Godfrey, R. W.; Gray, M. L.; Collins, J. R.

CS Agricultural Experiment Station, University Virgin Islands, St. Croix USVI, 00850, USA

SO Anim. Reprod. Sci. (1997), 47(1,2), 99-106

CODEN: ANRSDV; ISSN: 0378-4320

PB Elsevier

DT Journal

LA English

CC 2-3 (Mammalian Hormones)

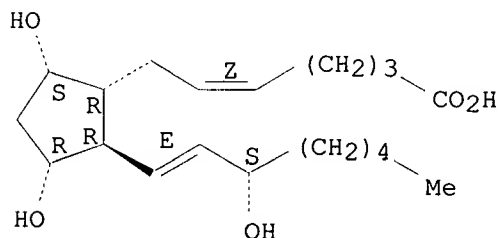
AB Two trials were conducted to evaluate the efficacy of estrous synchronization procedures in St. Croix White, Barbados Blackbelly hair and Florida Native wool ewes. In trial 1 (conducted in June), 27 ewes were treated with controlled internal drug release (CIDR) devices for 12 days (CIDR1) and 29 untreated ewes served as controls (CONT). The CIDR devices were removed on the same day that intact rams equipped with marking harnesses were placed with the ewes. Time to estrus after ram introduction was shorter in CIDR1 than CONT ewes. Within 3 days of ram introduction 100% of CIDR1 ewes but only 37.9% of CONT ewes had been in estrus. Conception rate at first estrus after ram introduction was 74.1% overall, with no effect of treatment, but days to conception were shorter in CIDR1 than CONT ewes. Ovulation rate at first estrus after ram introduction was not different between CIDR1 and CONT ewes. The CIDR1 ewes lambed earlier in the lambing season than CONT ewes, but there was no difference in the no. of lambs born per ewe. In Trial 2 (conducted in Oct.), 14 St. Croix White ewes were treated with CIDRs as in Trial 1

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(CIDR2) and 14 St. Croix White ewes were given two i.m. injections (15 mg) of prostaglandin F2.alpha. (PGF) 10 days apart. Intact rams were introduced on the day of CIDR removal or the second PGF injection. The CIDR2 ewes exhibited estrus earlier than PGF treated ewes. The conception rate to breeding at the synchronized estrus was similar between CIDR2 and PGF treated ewes. Progesterone concn. on Day 10 after the synchronized estrus was not different between CIDR2 and PGF treated ewes. These results indicate that estrus synchronization procedures can be used in sheep in the tropics without adversely fertility. Due to a lack of seasonal anestrus these procedures have the potential to be used all times of the year.

- ST estrous synchronization progesterone PGF2 **hair** sheep  
 IT Estrus  
 Female fertility  
 Ovulation  
 Photoperiodism  
 Seasonal rhythm  
 Sheep  
 (estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 IT Corpus luteum  
 (function; estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 IT Anestrus  
 (seasonal; estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 IT 551-11-1, Prostaglandin F2.alpha.  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BIOL (Biological study); USES (Uses)  
 (estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 IT 57-83-0, Progesterone, biological studies  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process); USES (Uses)  
 (estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 IT 551-11-1, Prostaglandin F2.alpha.  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BIOL (Biological study); USES (Uses)  
 (estrous synchronization with PGF2.alpha. and progesterone in **hair** sheep in tropics)  
 RN 551-11-1 HCAPLUS  
 CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,  
 (5Z,9.alpha.,11.alpha.,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



L24 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1995:677367 HCAPLUS  
 DN 123:75622

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TI Use of prostaglandins for increasing pigmentation in tissues  
 IN Stjernschantz, Johan; Resul, Bahram  
 PA Pharmacia AB, Swed.  
 SO PCT Int. Appl., 20 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

IC ICM A61K007-42  
 ICS A61K007-13; A61K031-557

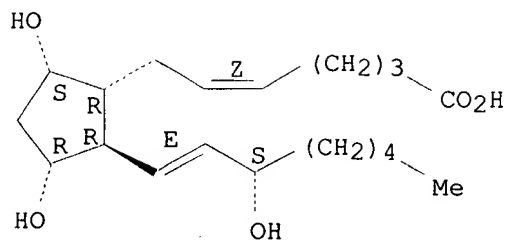
CC 2-7 (Mammalian Hormones)  
 Section cross-reference(s): 62, 63

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 9511003  | A1   | 19950427 | WO 1994-SE985   | 19941019 |
|      | W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ, VN   |      |          |                 |          |
|      | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  |      |          |                 |          |
|      | CA 2174655  | AA   | 19950427 | CA 1994-2174655 | 19941019 |
|      | AU 9480086  | A1   | 19950508 | AU 1994-80086   | 19941019 |
|      | EP 724425   | A1   | 19960807 | EP 1994-931257  | 19941019 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE   |      |          |                 |          |
|      | JP 09504021   | T2   | 19970422 | JP 1994-511697  | 19941019 |
| PRAI | SE 1993-3444  |      | 19931020 |                 |          |
|      | WO 1994-SE985   |      | 19941019 |                 |          |
| AB   | A method for producing a compn. contg. prostaglandins, derivs. or analogs thereof for increasing pigmentation of tissues or modified tissues, e.g. <b>hair</b> , is disclosed. Among these, derivs. and analogs of prostaglandin F2.alpha. and prostaglandin E2 in particular, are suitable for the purpose. An eye drop contg. 13,14-dihydro-17-phenyl-18,19,20-trinor-PGF2.alpha. iso-Pr ester at 1.5.mu.g/eye/day was applied for 4.5-6 mo to patients with depigmented spots to show repigmentation during treatment with the drug. |      |          |                 |          |
| ST   | prostaglandin pigmentation skin <b>hair</b> iris  |      |          |                 |          |
| IT   | <b>Hair</b><br>Skin<br>(prostaglandins for pigmentation of tissue)  |      |          |                 |          |
| IT   | Prostaglandins<br>RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(prostaglandins for pigmentation of tissue)  |      |          |                 |          |
| IT   | Eye<br>(iris, prostaglandins for pigmentation of tissue)  |      |          |                 |          |
| IT   | 53764-90-2P, PGF-2.alpha. isopropyl ester 71845-66-4P 130209-82-4P<br>RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)<br>(prostaglandins for pigmentation of tissue)   |      |          |                 |          |
| IT   | 363-24-6, PGE2 <b>551-11-1</b> , PGF-2.alpha.<br>RL: RCT (Reactant)<br>(prostaglandins for pigmentation of tissue)  |      |          |                 |          |
| IT   | <b>551-11-1</b> , PGF-2.alpha.<br>RL: RCT (Reactant)<br>(prostaglandins for pigmentation of tissue)   |      |          |                 |          |
| RN   | 551-11-1 HCAPLUS  |      |          |                 |          |
| CN   | Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-, (5Z,9.alpha.,11.alpha.,13E,15S)- (9CI) (CA INDEX NAME)  |      |          |                 |          |

Absolute stereochemistry.  
 Double bond geometry as shown.





L24 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1988:3835 HCAPLUS  
 DN 108:3835  
 TI Brain-type prostaglandin D synthetase occurs in the rat cochlea  
 AU Tachibana, Masayoshi; Fex, Joergen; Urade, Yoshihiro; Hayaishi, Osamu  
 CS Lab. Neuro-Otolaryngol., Natl. Inst. Neurol. Commun. Disord. Stroke,  
 Bethesda, MD, 20892, USA  
 SO Proc. Natl. Acad. Sci. U. S. A. (1987), 84(21), 7677-80  
 CODEN: PNASA6; ISSN: 0027-8424  
 DT Journal  
 LA English  
 CC 13-1 (Mammalian Biochemistry)  
 Section cross-reference(s): 2, 7  
 AB Prostaglandin D synthetase (EC 5.3.99.2) activity was found in the  
 high-speed (100,000 g, 1 h) supernatant of the homogenate of the cochlea  
 of adult rats. The specific activity (14.0 nmol/min/mg protein) was  
 6-7-fold higher than that in the central nervous system. The enzyme  
 showed full activity with 1 mM GSH, 1 mM 2-mercaptoethanol, or 0.5 mM  
 dithiothreitol and was almost completely inhibited by 1 mM  
 1-chloro-2,4-dinitrobenzene. The Km value for PGH2 was .apprx.20 .mu.M.  
 These catalytic properties are the same as those of rat brain  
 prostaglandin D synthetase but differ from those of rat spleen  
 prostaglandin D synthetase. The activity decreased to <20% of its initial  
 level after incubation with excess amts. of a polyclonal or a monoclonal  
 antibody against the brain enzyme, but the activity remained unchanged  
 with a polyclonal antibody against the spleen enzyme, indicating that the  
 brain-type enzyme synthesizes PGD2 in the cochlea. When cryosections of  
 5-wk-old (adult) rat cochleas were stained by an immunoperoxidase method  
 with antibodies against the brain enzyme, the immunoreactivity was found  
 in inner and outer **hair** cells, Claudius' cells, Dieters' cells,  
 marginal cells, basal cells, and cells of Reissner's membrane. In  
 8-day-old rats, the immunoreactivity was found in all of these cell types  
 except **hair** cells. The immunoreactivity in **hair** cells  
 was found in only 1 specimen from 9-day-old animals, and no  
 immunoreactivity was found in spiral ganglion cells at any of the ages  
 examd. Thus, PGD2 is produced by the brain-type synthetase in the  
 indicated types of cochlear cells.  
 ST prostaglandin D synthetase ear cochlea; PGD2 formation ear cochlea  
 IT Michaelis constant  
 (of prostaglandin D synthetase, of ear cochlea)  
 IT Development, mammalian  
 (prostaglandin D synthetase of ear cochlea in)  
 IT Ear  
 (cochlea, prostaglandin D synthetase of)  
 IT 65802-85-9, Prostaglandin D synthetase  
 RL: BIOL (Biological study)  
 (brain-type, of ear cochlea)  
 IT 41598-07-6, Prostaglandin D2  
 RL: FORM (Formation, nonpreparative)  
 (formation of, by ear cochlea)  
 IT 42935-17-1, Prostaglandin H2

RL: RCT (Reactant)

(reaction of, with prostaglandin D synthetase of ear cochlea, kinetics of)

IT 41598-07-6, Prostaglandin D2

RL: FORM (Formation, nonpreparative)

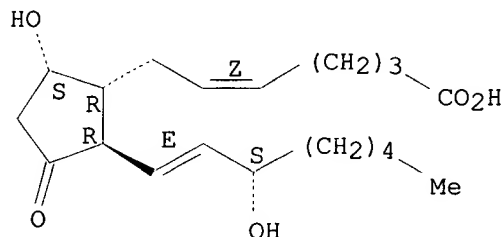
(formation of, by ear cochlea)

RN 41598-07-6 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,15-dihydroxy-11-oxo-, (5Z,9.alpha.,13E,15S)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L24 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 1999 ACS

AN 1978:501455 HCAPLUS

DN 89:101455

TI Hormones, cyclic nucleotides, and prostaglandins

AU Belman, Sidney; Troll, Walter

CS Inst. Environ. Med., New York Univ. Med. Cent., New York, N. Y., USA

SO Carcinog. - Compr. Surv. (1978), 2 (Mech. Tumor Promot. Cocarcinog.), 117-34

CODEN: CCSUDL; ISSN: 0145-0158

DT Journal

LA English

CC 4-7 (Toxicology)

AB Of 9 substances tested, only gangliosides, esp. GM2, inhibited hemolysis from topical application of 12-O-tetradecanoylphorbol 13-acetate (I) [16561-29-8] to mouse skin. However, gangliosides did not inhibit anthralin [480-22-8]-induced hemolysis, indicating that gangliosides are the probable red blood cell membrane receptors for I but not for anthralin. Four steroid hormones dose-dependently inhibited **hair** regrowth in mice in the order dexamethasone [50-02-2] >> prednisolone [50-24-8] > hydrocortisone [50-23-7] > cortisone [53-06-5]. Schering 11572 [67512-15-6] did not inhibit **hair** regrowth. Thyroid hormones T3 [6893-02-3] and T4 [51-48-9] stimulated **hair** regrowth in the order T3 > T4. Thus, **hair** growth per se is not a factor in mouse skin tumorigenesis because both steroid and thyroid hormones inhibited promotion despite their opposite effects on **hair** growth. Epidermal cyclic AMP [60-92-4] concns. were decreased, and cyclic GMP [7665-99-8] concns. increased in I-treated mice. Prostaglandins E2 [363-24-6] (1 and 5 .mu.g), F2.alpha. [551-11-1] (5 .mu.g) and E1 [745-65-3] (2 .mu.g) inhibited I tumor promotion. A 1 .mu.g dose of prostaglandin E1 enhanced tumor promotion. Tumor initiation by 7,12-dimethylbenz[a]anthracene [57-97-6] was inhibited by application of dexamethasone 5 days before, and during initiation. Dexamethasone applied for 5 days at 30 and 60 days after initiation enhanced tumorigenicity. Similar effects were obsd. with tosyl phenylalanine chloromethyl ketone [329-30-6]. An antipain-leupeptin mixt. [67481-14-5] applied during initiation by .beta.-propiolactone [57-57-8] delayed and inhibited tumorigenesis.

ST carcinogenesis hormone nucleotide prostaglandin; **hair** growth steroid carcinogenesis

IT Prostaglandins  
RL: BIOL (Biological study)  
(carcinogenesis in relation to)

IT Oils  
RL: BIOL (Biological study)  
(croton, carcinogenesis from, dexamethasone in relation to)

IT Skin, neoplasm  
(formation of, cyclic nucleotides and hormones and prostaglandins in relation to)

IT Hemolysis  
(from tetradecanoylphorbol acetate, inhibitors of, carcinogenesis in relation to)

IT **Hair**  
(growth of, steroid hormones effect on, carcinogenesis in relation to)

IT Steroids, biological studies  
Thyroid hormones  
RL: BIOL (Biological study)  
(**hair** growth response to, carcinogenesis in relation to)

IT Cerebrosides  
Fetuin  
Leupeptins  
Peanut oil  
RL: BIOL (Biological study)  
(hemolysis from tetradecanoylphorbol acetate in relation to)

IT Gangliosides  
Gangliosides  
RL: BIOL (Biological study)  
(hemolysis from tetradecanoylphorbol acetate inhibition by)

IT Neoplasm  
(of skin, cyclic nucleotides and hormones and prostaglandins in relation to)

IT Vibrio comma  
(toxin of, hemolysis from tetradecanoylphorbol acetate in relation to)

IT 51-48-9, biological studies 329-30-6 363-24-6 **551-11-1**  
745-65-3 6893-02-3 67481-14-5  
RL: BIOL (Biological study)  
(carcinogenesis in relation to)

IT 50-02-2 50-23-7 50-24-8 53-06-5 67512-15-6  
RL: BIOL (Biological study)  
(**hair** growth response to, carcinogenesis in relation to)

IT 16561-29-8  
RL: BIOL (Biological study)  
(hemolysis and tumorigenesis by, steroid hormones and cyclic nucleotides in relation to)

IT 480-22-8  
RL: BIOL (Biological study)  
(hemolysis and tumorigenesis by, steroid hormones in relation to)

IT 4468-05-7 7683-59-2 11028-71-0 17673-25-5 37558-19-3 57716-89-9  
67528-33-0  
RL: BIOL (Biological study)  
(hemolysis from tetradecanoylphorbol acetate in relation to)

IT 60-92-4 7665-99-8  
RL: BIOL (Biological study)  
(of skin, carcinogenesis in relation to)

IT 57-57-8  
RL: BIOL (Biological study)  
(tumorigenesis by, antipain-leupeptin mixt. inhibition of)

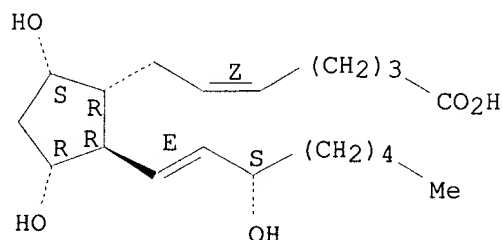
IT 57-97-6  
RL: BIOL (Biological study)  
(tumorigenesis by, dexamethasone effect on)

IT **551-11-1**  
RL: BIOL (Biological study)  
(carcinogenesis in relation to)

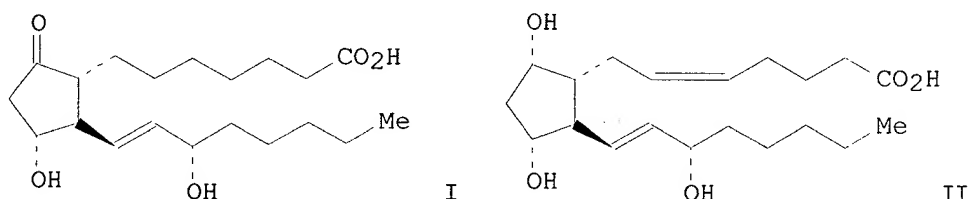
RN 551-11-1 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,  
(5Z,9.alpha.,11.alpha.,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L24 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 1999 ACS  
AN 1978:16460 HCAPLUS  
DN 88:16460  
TI Effects of prostaglandins upon **hair** growth in mice  
AU Houssay, Alberto B.; Arias, Norberto H.; Davison, Tomas A.; Epper, Carlos E.  
CS Fac. Med., Univ. Buenos Aires, Buenos Aires, Argent.  
SO Acta Physiol. Lat. Am. (1977), 26(3), 186-91  
CODEN: APLTAF  
DT Journal  
LA English  
CC 2-5 (Hormone Pharmacology)  
GI



AB The effect of prostaglandins upon the diffuse **hair** wave induced by gonadectomy was studied in male C3H mice. PGE1 (I) [745-65-3] and PGF2.alpha. tromethamine salt (II tromethamine salt) [38562-01-5] were administered twice a day i.p. during 22 days, in daily doses from 1 to 6 .mu.g. The animals had their back clipped and were castrated at the beginning of each expt. At the end of the 22 day exptl. period, all the castrated control mice were completely covered by **hair**, but in the castrated, prostaglandin-treated mice a marked inhibition of **hair** growth was noticed.  
ST prostaglandin **hair** growth  
IT **Hair**  
(growth of, prostaglandins inhibition of)  
IT Castration  
(**hair** growth after, prostaglandins inhibition of)  
IT Prostaglandins  
RL: BIOL (Biological study)  
(**hair** growth inhibition by)  
IT 745-65-3 38562-01-5  
RL: BIOL (Biological study)  
(**hair** growth inhibition by)  
IT 38562-01-5

RL: BIOL (Biological study)  
(hair growth inhibition by)

RN 38562-01-5 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,  
(5Z,9.alpha.,11.alpha.,13E,15S)-, compd. with 2-amino-2-(hydroxymethyl)-  
1,3-propanediol (1:1) (9CI) (CA INDEX NAME)

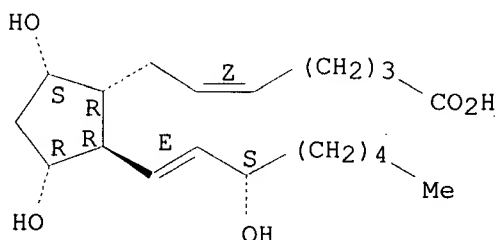
CM 1

CRN 551-11-1

CMF C20 H34 O5

CDES 4:5Z,9A,11A,13E,15S.PROST

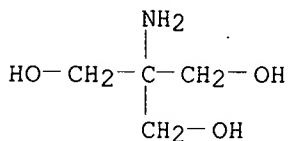
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 77-86-1

CMF C4 H11 N O3



=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 11:57:30 ON 28 OCT 1999

FILE LAST UPDATED: 26 OCT 1999 (19991026/UP). FILE COVERS 1960 TO DATE.

MEDLINE has been reloaded to reflect the annual MeSH changes made by the National Library of Medicine for 1999. Enter HELP RLOAD for details.

OLDMEDLINE, data from 1960 through 1965 from the Cumulated Index Medicus (CIM), has been added to MEDLINE. See HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> D L27 ALL

L27 ANSWER 1 OF 1 MEDLINE

AN 97377909 MEDLINE

KATHLEEN FULLER STIC LIBRARY 308-4290

DN 97377909  
 TI A comparison of two methods of oestrous synchronisation of hair sheep in the tropics.  
 AU Godfrey R W; Gray M L; Collins J R  
 CS University of the Virgin Islands, Agricultural Experiments Station, St. Croix USVI, US Virgin Islands.. rgodfre@uvi.edu  
 SO ANIMAL REPRODUCTION SCIENCE, (1997 May) 47 (1-2) 99-106.  
 Journal code: CV3. ISSN: 0378-4320.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199711  
 EW 19971102  
 AB Two trials were conducted to evaluate the efficacy of oestrous synchronisation procedures in St. Croix White, Barbados Blackbelly hair and Florida Native wool ewes. In Trial 1 (conducted in June), 27 ewes were treated with controlled internal drug release (CIDR) devices for 12 days (CIDR1) and 29 untreated ewes served as controls (CONT). The CIDR devices were removed on the same day that intact rams equipped with marking harnesses were placed with the ewes. Time to oestrus after ram introduction was shorter ( $P < 0.0001$ ) in CIDR1 than CONT ewes. Within 3 days of ram introduction 100% of CIDR1 ewes but only 37.9% of CONT ewes had been in oestrus ( $P < 0.0001$ ). Conception rate at first oestrus after ram introduction was 74.1% overall, with no effect ( $P > 0.10$ ) of treatment, but days to conception were shorter ( $P < 0.001$ ) in CIDR1 than CONT ewes. Ovulation rate at first oestrus after ram introduction was not different ( $P > 0.10$ ) between CIDR1 and CONT ewes. The CIDR1 ewes lambed earlier ( $P < 0.004$ ) in the lambing season than CONT ewes, but there was no difference in the number of lambs born per ewe ( $P > 0.10$ ). In Trial 2 (conducted in October), 14 St. Croix White ewes were treated with CIDRs as in Trial 1 (CIDR2) and 14 St. Croix White ewes were given two i.m. injections (15 mg) of prostaglandin F2 alpha (PGF) 10 days apart. Intact rams were introduced on the day of CIDR removal or the second PGF injection. The CIDR2 ewes exhibited oestrus earlier ( $P < 0.01$ ) than PGF treated ewes. The conception rate to breeding at the synchronised oestrus was similar ( $P > 0.10$ ) between CIDR2 and PGF treated ewes. Progesterone concentration on Day 10 after the synchronised oestrus was not different ( $P > 0.10$ ) between CIDR2 and PGF treated ewes. These results indicate that oestrous synchronisation procedures can be used in sheep in the tropics without adversely affecting fertility. Due to a lack of seasonal anoestrous these procedures have the potential to be used during all times of the year.

CT Check Tags: Animal; Comparative Study; Female; Male  
 Corpus Luteum: PH, physiology  
 Dinoprost: AD, administration & dosage  
 Dinoprost: PD, pharmacology  
 Drug Implants  
 Enzyme-Linked Immunosorbent Assay: MT, methods  
 Enzyme-Linked Immunosorbent Assay: VE, veterinary  
 Estrus: DE, drug effects  
 \*Estrus: PH, physiology  
 \*Estrus Synchronization: PH, physiology  
 Fertility: PH, physiology  
**Hair**  
 Infusion Pumps, Implantable: VE, veterinary  
 Linear Models  
 Models, Biological  
 Ovulation: PH, physiology  
 Pregnancy  
 Pregnancy Rate  
 Seasons  
 Sheep: GE, genetics  
 \*Sheep: PH, physiology

\*Tropical Climate  
 Virgin Islands of the United States  
 Wool

RN 551-11-1 (Dinoprost)  
 CN 0 (Drug Implants)

=> FILE EMBASE

FILE 'EMBASE' ENTERED AT 11:57:45 ON 28 OCT 1999  
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FILE COVERS 1974 TO 21 Oct 1999 (19991021/ED)

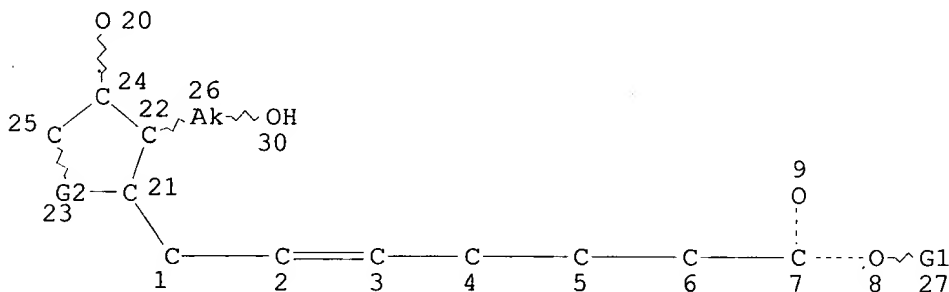
EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

=> D QUE L30

L19 STR

CH-OH  
 @28 29



VAR G1=H/AK

VAR G2=CH/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L22 1804 SEA FILE=REGISTRY SSS FUL L19

L28 15227 SEA FILE=EMBASE ABB=ON L22

L29 6543 SEA FILE=EMBASE ABB=ON HAIR+NT/CT

L30 1 SEA FILE=EMBASE ABB=ON L28 AND L29

=> D L30 ALL

L30 ANSWER 1 OF 1 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.

AN 75086029 EMBASE

DN 1975086029

TI Effects of hormones and nucleotides on ciliary beating in frog esophagus  
 and guinea pig trachea.

AU Carlson H.E.; Robbins J.

KATHLEEN FULLER STIC LIBRARY 308-4290

CS Clin. Endocrinol. Branch, Nat. Inst. Arthr. Metab. Dig. Dis., NIH,  
Bethesda, Md. 20014, United States

SO Life Sciences, (1974) 14/12 (2413-2426).  
CODEN: LIFSAK

DT Journal

FS 037 Drug Literature Index  
002 Physiology

LA English

AB The in vivo effects of various hormones, nucleotides and related  
substances on the rate of ciliary beating in frog esophagus and guinea pig  
trachea, were studied using particle transport and photoelectric methods.  
Frog esophageal ciliary beating in vitro was greatly accelerated by  
acetylcholine, eserine, prostaglandin A1 and E2, N6-2'-O-dibutyryl  
adenosine--3', 5'-cyclic monophosphate, all tri and di-phosphonucleotides  
(ATP, ADP, UTP, UDP, etc.), ethylenediaminetetraacetate, ethylene glycol  
bis (2 aminoethyl) tetraacetate and calcium free medium. Adenosine  
monophosphate, epinephrine, serotonin at low concentrations,  
3,3',5'-L-triiodothyronine, creatine phosphate and phosphoenolpyruvate were  
inactive or only minimally stimulatory in the frog. All substances tested,  
including those active in the frog preparation, were inactive on the  
guinea pig trachea. Furthermore, guinea pig ciliary activity was  
unaffected by hyperthyroidism or hypothyroidism induced in the intact  
animal before testing.

CT Medical Descriptors:  
\*dose response  
\*drug comparison  
\*esophagus  
**\*eyelash**  
\*frog  
\*guanosine 3',5' diphosphate  
\*guinea pig  
\*hyperthyroidism  
\*hypothyroidism  
\*thyroid powder  
\*trachea  
drug response  
theoretical study  
in vitro study  
Drug Descriptors:  
\*acetylcholine  
\*adenosine 2',3' phosphate  
\*adenosine diphosphate  
\*adenosine triphosphate  
\*adrenalin  
\*ascorbic acid  
\*creatine phosphate  
\*cyclic amp  
\*cytidine diphosphate  
\*bucladesine  
\*edetac acid  
\*cyclic gmp  
\*lithiothyronine  
\*phosphoenolpyruvate  
\*physostigmine  
\*propylthiouracil  
\*prostaglandin a1  
\*prostaglandin b1  
\*prostaglandin e1  
\*prostaglandin e2  
\*prostaglandin f2 alpha  
\*ringer lactate solution  
\*serotonin  
\*theophylline  
\*uridine diphosphate



RN (acetylcholine) 51-84-3, 60-31-1, 66-23-9; (adenosine 2',3' phosphate) 634-01-5; (adenosine diphosphate) 20398-34-9, 58-64-0; (adenosine triphosphate) 15237-44-2, 56-65-5, 987-65-5; (adrenalin) 51-43-4, 55-31-2, 6912-68-1; (ascorbic acid) 134-03-2, 15421-15-5, 50-81-7; (creatine phosphate) 67-07-2; (cyclic amp) 60-92-4; (cytidine diphosphate) 63-38-7; (buccladesine) 16980-89-5, 362-74-3; (edetic acid) 150-43-6, 60-00-4; (cyclic gmp) 7665-99-8; (liothyronine) 6138-47-2, 6893-02-3; (phosphoenolpyruvate) 33016-40-9, 5541-93-5, 73-89-2; (physostigmine) 57-47-6, 64-47-1; (propylthiouracil) 51-52-5; (prostaglandin a1) 14152-28-4; (prostaglandin b1) 13345-51-2; (prostaglandin e1) 745-65-3; (prostaglandin e2) 363-24-6; (prostaglandin f2 alpha) 551-11-1; (ringer lactate solution) 8022-63-7; (serotonin) 50-67-9; (theophylline) 58-55-9, 5967-84-0, 8055-07-0, 8061-56-1, 99007-19-9; (uridine diphosphate) 58-98-0

CO Upjohn; Cahnmann; J.t.baker; Boehringer mannheim; Nutritional biochem; Merck; Sigma

=> FILE BIOSIS  
 FILE 'BIOSIS' ENTERED AT 11:58:23 ON 28 OCT 1999  
 COPYRIGHT (C) 1999 BIOSIS(R)

FILE COVERS 1969 TO DATE.  
 CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
 FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 26 October 1999 (19991026/ED)

The BIOSIS file has been reloaded. Enter HELP RLOAD and HELP REINDEXING for details.

=> D L32 1-5 ALL

L32 ANSWER 1 OF 5 BIOSIS COPYRIGHT 1999 BIOSIS  
 AN 1999:276138 BIOSIS  
 DN PREV199900276138  
 TI Induction of anagen **hair** growth in telogen mouse skin by topical latanoprost application.  
 AU Voss, N. G. (1); Lindstrom, M. J. (1); Zimbric, M. L. (1); Albert, D. M. (1); Uno, H.  
 CS (1) University Wisconsin Madison, Madison, WI USA  
 SO IOVS, (March 15, 1999) Vol. 40, No. 4, pp. S676.  
 Meeting Info.: Annual Meeting of the Association for Research in Vision and Ophthalmology Fort Lauderdale, Florida, USA May 9-14, 1999 Association for Research in Vision and Ophthalmology  
 .  
 DT Conference  
 LA English  
 CC Pharmacology - General \*22002  
 Pathology, General and Miscellaneous - Therapy \*12512  
 Integumentary System - General; Methods \*18501  
 Sense Organs, Associated Structures and Functions - General; Methods \*20001  
 General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals \*00520  
 BC Muridae 86375  
 IT Major Concepts  
 Integumentary System (Chemical Coordination and Homeostasis);  
 Pharmacology; Sense Organs (Sensory Reception)  
 IT Parts, Structures, & Systems of Organisms  
**hair** follicles: integumentary system  
 IT Diseases  
 glaucoma: eye disease; hypertrichosis: integumentary system disease  
 IT Chemicals & Biochemicals

KATHLEEN FULLER STIC LIBRARY 308-4290

latanoprost: antialopecia agent, antiglaucoma - drug, prostaglandin F-2-alpha analogue, topical application; prostaglandin F-2-alpha

IT Alternate Indexing  
Glaucoma (MeSH); Hypertrichosis (MeSH)

IT Miscellaneous Descriptors  
hair growth; Meeting Abstract; Meeting Poster

ORGN Super Taxa  
Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name  
C57BL/6 mouse (Muridae): adult, animal model

ORGN Organism Superterms  
Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Vertebrates;  
Rodents; Vertebrates

RN 130209-82-4 (LATANOPROST)  
551-11-1 (PROSTAGLANDIN F-2-ALPHA)

L32 ANSWER 2 OF 5 BIOSIS COPYRIGHT 1999 BIOSIS  
AN 1998:63978 BIOSIS  
DN PREV199800063978  
TI Progesterone (P4) and luteinizing hormone (LH) levels in hair  
sheep after estrous synchronization with either progesterone or  
prostaglandin F2alpha (PGF).

AU Godfrey, R. W. (1); Hensley, E. L. (1); Collins, J. R.; Wheaton, J. E.  
CS (1) Agric. Experimental Station, Univ. Virgin Island, St. Croix USA Virgin  
Islands

SO Journal of Animal Science, (1997) Vol. 75, No. SUPPL. 1, pp. 232.  
Meeting Info.: 89th Annual Meeting of the American Society of Animal  
Science Nashville, Tennessee, USA July 29-August 1, 1997  
ISSN: 0021-8812.

DT Conference  
LA English

CC Animal Production - Breeds and Breeding \*26506  
Circadian Rhythms and Other Periodic Cycles \*07200  
Biochemical Studies - Lipids \*10066  
Biochemical Studies - Sterols and Steroids \*10067  
Reproductive System - General; Methods \*16501  
Reproductive System - Physiology and Biochemistry \*16504  
Endocrine System - General \*17002  
General Biology - Symposia, Transactions and Proceedings of Conferences,  
Congresses, Review Annuals \*00520

BC Bovidae 85715

IT Major Concepts  
Animal Husbandry (Agriculture); Reproduction

IT Chemicals & Biochemicals  
luteinizing hormone; progesterone: fertility - drug, hormone - drug;  
prostaglandin F-2-alpha: fertility - drug, hormone - drug

IT Industry  
livestock industry

IT Miscellaneous Descriptors  
estrus synchronization; Meeting Abstract

ORGN Super Taxa  
Bovidae: Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name  
sheep (Bovidae): breed-Barbados Blackbelly, breed-St. Croix White, ewe,  
hair sheep, female

ORGN Organism Superterms  
Animals; Artiodactyls; Chordates; Mammals; Nonhuman Mammals; Nonhuman  
Vertebrates; Vertebrates

RN 57-83-0 (PROGESTERONE)  
9002-67-9 (LUTEINIZING HORMONE)  
551-11-1 (PROSTAGLANDIN F-2-ALPHA)

L32 ANSWER 3 OF 5 BIOSIS COPYRIGHT 1999 BIOSIS  
AN 1997:359104 BIOSIS

DN PREV199799665507  
TI A comparison of two methods of oestrous synchronisation of **hair** sheep in the tropics.  
AU Godfrey, R. W. (1); Gray, M. L.; Collins, J. R.  
CS (1) Univ. Virgin Islands, Agric. Exp. Stn., RR 2 Box 10000, Kingshill, St. Croix USVI 00850, USA Virgin Channel Islands  
SO Animal Reproduction Science, (1997) Vol. 47, No. 1-2, pp. 99-106. ISSN: 0378-4320.  
DT Article  
LA English  
AB Two trials were conducted to evaluate the efficacy of oestrous synchronisation procedures in St. Croix White, Barbados Blackbelly **hair** and Florida Native wool ewes. In Trial 1 (conducted in June), 27 ewes were treated with controlled internal drug release (CIDR) devices for 12 days (CIDR1) and 29 untreated ewes served as controls (CONT). The CIDR devices were removed on the same day that intact rams equipped with marking harnesses were placed with the ewes. Time to oestrus after ram introduction was shorter (P lt 0.0001) in CIDR1 than CONT ewes. Within 3 days of ram introduction 100% of CIDR1 ewes but only 37.9% of CONT ewes had been in oestrus (P lt 0.0001). Conception rate at first oestrus after ram introduction was 74.1% overall, with no effect (P gt 0.10) of treatment, but days to conception were shorter (P lt 0.001) in CIDR1 than CONT ewes. Ovulation rate at first oestrus after ram introduction was not different (P gt 0.10) between CIDR1 and CONT ewes. The CIDR1 ewes lambed earlier (P lt 0.004) in the lambing season than CONT ewes, but there was no difference in the number of lambs born per ewe (P gt 0.10). In Trial 2 (conducted in October), 14 St. Croix White ewes were treated with CIDRs as in Trial 1 (CIDR2) and 14 St. Croix White ewes were given two i.m. injections (15 mg) of prostaglandin F2a (PGF) 10 days apart. Intact rams were introduced on the day of CIDR removal or the second PGF injection. The CIDR2 ewes exhibited oestrus earlier (P lt 0.01) than PGF treated ewes. The conception rate to breeding at the synchronised oestrus was similar (P gt 0.10) between CIDR2 and PGF treated ewes. Progesterone concentration on Day 10 after the synchronised oestrus was not different (P gt 0.10) between CIDR2 and PGF treated ewes. These results indicate that oestrous synchronisation procedures can be used in sheep in the tropics without adversely affecting fertility. Due to a lack of seasonal anoestrous these procedures have the potential to be used during all times of the year.  
CC Biochemical Studies - General \*10060  
Reproductive System - General; Methods \*16501  
Endocrine System - General \*17002  
Pharmacology - General \*22002  
BC Bovidae \*85715  
IT Major Concepts  
Biochemistry and Molecular Biophysics; Endocrine System (Chemical Coordination and Homeostasis); Pharmacology; Reproductive System (Reproduction)  
IT Chemicals & Biochemicals  
PROGESTERONE; PROSTAGLANDIN F2 ALPHA  
IT Miscellaneous Descriptors  
BREED-BARBADOS BLACKBELLY; BREED-FLORIDA NATIVE; BREED-ST. CROIX WHITE; CONTROLLED INTERNAL DRUG RELEASE; ENDOCRINE SYSTEM; ESTRUS  
SYNCHRONIZATION METHODS; FERTILITY; HORMONE-DRUG; METHODOLOGY; PROGESTERONE; PROSTAGLANDIN F2 ALPHA; REPRODUCTIVE SYSTEM  
ORGN Super Taxa  
Bovidae: Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia  
ORGN Organism Name  
sheep (Bovidae)  
ORGN Organism Superterms  
animals; artiodactyls; chordates; mammals; nonhuman mammals; nonhuman vertebrates; vertebrates  
RN 57-83-0 (PROGESTERONE)  
551-11-1 (PROSTAGLANDIN F2 ALPHA)

L32 ANSWER 4 OF 5 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1993:412037 BIOSIS

DN PREV199396077762

TI Differential effect of 9-beta-chloro-16, 16-dimethylprostaglandin E-2 (nocloprost) on the radiation response of human normal fibroblasts and colon adenocarcinoma cells.

AU Zaffaroni, N. (1); Villa, R. (1); Orlandi, L. (1); De Pascale, A.; Del Mastro, S.; Silvestrini, R. (1)

CS (1) Oncologia Sperimentale C, Ist. Nazionale Studio Cura Tumori Italy

SO Radiation Research, (1993) Vol. 135, No. 1, pp. 88-92.

ISSN: 0033-7587.

DT Article

LA English

AB The possible influence of 9-beta-chloro-16,16-dimethyl prostaglandin E-2 (nocloprost) on the effect of 137Cs gamma irradiation was investigated comparatively in human normal fibroblasts and colon adenocarcinoma cells. By itself, the compound did not influence the proliferation of cells of either cell type or the clonogenic capacity of carcinoma cells. Moreover, nocloprost did not induce any DNA strand breakage, as evaluated by neutral elution, in cells of either cell type. A 2-h incubation with nocloprost before irradiation induced an enhancement of fibroblast survival after an exposure of 10 Gy. This protective effect was not observed in adenocarcinoma cells under the same treatment conditions. The amount of double-strand breaks induced by 50 Gy was reduced in normal cells but not in tumor cells exposed to the prostaglandin analog before irradiation. Moreover, incubation with nocloprost for 2 h after irradiation remarkably enhanced the rate of rejoining of DNA breaks in fibroblasts but not in adenocarcinoma cells. Overall, these findings indicate a specific radioprotective effect of nocloprost in normal cells and no influence of the compound on the cytotoxic effect of ionizing radiation on colon adenocarcinoma cells.

CC Cytology and Cytochemistry - Human \*02508

Radiation - Radiation and Isotope Techniques \*06504

Biochemical Studies - Nucleic Acids, Purines and Pyrimidines 10062

Biochemical Studies - Lipids 10066

Pathology, General and Miscellaneous - Therapy 12512

Digestive System - Pathology \*14006

Endocrine System - General \*17002

Pharmacology - Clinical Pharmacology \*22005

Pharmacology - Digestive System \*22014

Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects \*24004

Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy \*24008

BC Hominidae \*86215

IT Major Concepts

Cell Biology; Endocrine System (Chemical Coordination and Homeostasis);

Gastroenterology (Human Medicine, Medical Sciences); Oncology (Human

Medicine, Medical Sciences); Pharmacology; Radiology (Medical Sciences)

IT Chemicals & Biochemicals

NOCLOPROST

IT Miscellaneous Descriptors

ANTINEOPLASTIC-DRUG; HAIR LOSS; LEG CONTRACTURE;

RADIOPROTECTORANT-DRUG

ORGN Super Taxa

Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name

Hominidae (Hominidae)

ORGN Organism Superterms

animals; chordates; humans; mammals; primates; vertebrates

RN 79360-43-3 (NOCLOPROST)

L32 ANSWER 5 OF 5 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1978:164764 BIOSIS

DN BA65:51764  
 TI EFFECTS OF PROSTAGLANDINS UPON **HAIR** GROWTH IN MICE.  
 AU HOUSSAY A B; ARIAS N H; DAVISON T A; EPPER C E  
 CS FAC. MED.; UNIV. B. AIRES, BUENOS AIRES, ARGENT.  
 SO ACTA PHYSIOL LAT AM, (1976 (RECD 1977)) 26 (3), 186-191.  
 CODEN: APLTAF. ISSN: 0001-6764.  
 FS BA; OLD  
 LA English  
 AB The effect of prostaglandins [PG] upon the diffuse **hair** wave [of the cycle] induced by gonadectomy was studied in male C3H mice. PGE1 and PGF2.alpha., tromethamine salt were administered twice a day i.p. for 22 days, in daily doses from 1-6 .mu.g. The animals had their backs clipped and were castrated at the beginning of each experiment. At the end of the 22 day experimental period, while all the castrated control mice were completely covered by **hair**, the castrated PG treated mice showed a marked inhibition of the **hair** growth.  
 CC Circadian Rhythms and Other Periodic Cycles 07200  
 Biochemical Studies - Lipids 10066  
 Anatomy and Histology, General and Comparative - Experimental Anatomy 11104  
 Metabolism - Lipids \*13006  
 Reproductive System - General; Methods 16501  
 Endocrine System - General \*17002  
 Endocrine System - Gonads and Placenta \*17006  
 Integumentary System - Physiology and Biochemistry \*18504  
 Integumentary System - Pathology 18506  
 Pharmacology - Endocrine System \*22016  
 Pharmacology - Integumentary System, Dental and Oral Biology \*22020  
 Developmental Biology - Embryology - Morphogenesis, General 25508  
 BC Muridae 86375  
 IT Miscellaneous Descriptors  
 PROSTAGLANDIN E-1 PROSTAGLANDIN F-2-ALPHA HORMONE-DRUGS GONADECTOMY  
 RN 551-11-1 (PROSTAGLANDIN F-2-ALPHA)  
 745-65-3 (PROSTAGLANDIN E-1)

=> FILE USPATFU;

FILE 'USPATFULL' ENTERED AT 11:59:05 ON 28 OCT 1999

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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 26 Oct 1999 (19991026/PD)

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CA INDEXING IS CURRENT THROUGH 27 Oct 1999 (19991027/UPCA)

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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 1999

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: July 1999

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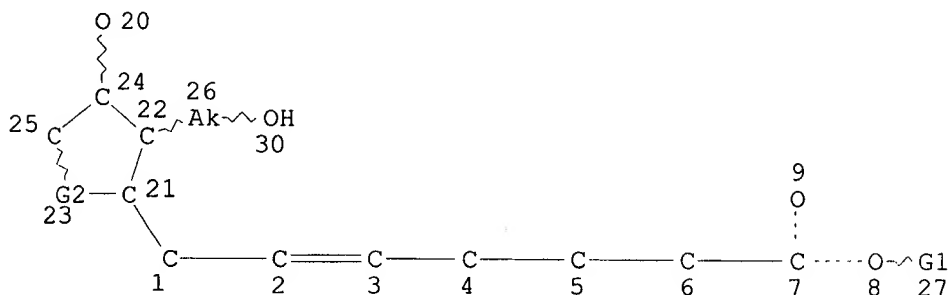
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 >>> the /IC5 and /IC fields include the corresponding catchword <<<  
 >>> terms from the IPC subject headings and subheadings. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L36

L19 STR

CH--OH  
@28 29



VAR G1=H/AK

VAR G2=CH/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L22 1804 SEA FILE=REGISTRY SSS FUL L19

L33 808 SEA FILE=USPATFULL ABB=ON L22

L34 0 SEA FILE=USPATFULL ABB=ON L33 AND HAIR(5A)GROW?

L35 4 SEA FILE=USPATFULL ABB=ON L33 AND HAIR

L36 4 SEA FILE=USPATFULL ABB=ON L34 OR L35

=> D L36 BIB AB HIT 1-4

L36 ANSWER 1 OF 4 USPATFULL

AN 1999:37090 USPATFULL

TI Therapeutic methods utilizing naturally derived bio-active complexes and delivery systems therefor

IN Danielov, Michael M., 98-25 65th Rd., Apt. 2E, Rego Park, NY, United States 11374

PA Danielov, Michael M., Rego Park, NY, United States (U.S. individual)

PI US 5885974 19990323

AI US 1994-350234 19941206 (8)

DT Utility

EXNAM Primary Examiner: Criares, Theodore J.

LREP Helfgott & Karas, P.C.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 30 Drawing Figure(s); 30 Drawing Page(s)

LN.CNT 2958

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for correcting biological information transfer in a patient in need of such therapy which comprise administration to a patient of a composition comprising a therapeutically effective amount

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of a biocomplex comprising at least one bioactive agent from each of the three informational blocks of biological information transfer, each agent being present in an amount sufficient to correct the biological information transfer of the patient under treatment and resulting in the resumption of normal cell metabolism, said amount being less than the buffering amount of said agent; together with a carrier therefor.

DETD The **hair** of the dorsal skin was cut but not shaven. The biocomplexes were spread on the skin at a rate of 5 ml per 150 cm.<sup>sup.2</sup>, and were tested by comparison with controls containing only vehicle. Tissue samples (8-10 mm stamp biopsies) were removed every thirty minutes during a five hour experimental period. Tissue samples were immediately shock-frozen in liquid nitrogen. Later, they were homogenized in polytron-type homogenizer and appropriate extraction procedures performed to evaluate the specific receptor's activity.

DETD **Hair** and scalp diseases

DETD In patients with a recognized **hair** and scalp disease, efficacy was reported as follows: alopecia--80%; and seborrhea--86% using the compositions of Examples 6, 16 and 17 simultaneously.

IT 50-14-6, Ergocalciferol 50-23-7, Hydrocortisone 50-28-2, .beta.-Estradiol, biological studies 50-81-7, L-Ascorbic acid, biological studies 51-61-6, Dopamine, biological studies 52-39-1, Aldosterone 52-89-1, L-Cysteine hydrochloride 53-59-8, .beta.-NADP 53-84-9, .beta.-NAD 54-47-7, Pyridoxal-5-phosphate 55-31-2, Epinephrine hydrochloride 56-65-5, Adenosine triphosphate, biological studies 56-81-5D, 1,2,3-Propanetriol, 1,2-diacyl derivs. 56-89-3, L-Cystine, biological studies 57-11-4, Octadecanoic acid, biological studies 57-83-0, Progesterone, biological studies 57-87-4, Ergosterol 57-88-5, Cholesterol, biological studies 58-56-0, Pyridoxine hydrochloride 58-85-5, Biotin 58-95-7, .alpha.-Tocopherol acetate 59-30-3, Folic acid, biological studies 60-18-4, L-Tyrosine, biological studies 60-33-3, 9,12-Octadecadienoic acid (Z,Z)-, biological studies 63-91-2, L-Phenylalanine, biological studies 65-71-4, Thymine 66-22-8, Uracil, biological studies 67-03-8, Thiamine hydrochloride 71-30-7, Cytosine 73-22-3, L-Tryptophan, biological studies 73-24-5, Adenine, biological studies 73-40-5, Guanine 79-81-2, Retinol palmitate 85-61-0, Coenzyme A, biological studies 86-01-1, Guanosine triphosphate 96-26-4, Dihydroxyacetone 98-92-0, Nicotinamide 112-85-6, Behenic acid 113-79-1, Arginine vasopressin 117-39-5, Quercetin 122-32-7, Triolein 123-33-1, Maleic hydrazide 135-16-0, Tetrahydrofolic acid 137-08-6, Pantothenic acid hemicalcium salt 145-42-6, Sodium taurocholate 154-87-0, Cocarboxylase 329-56-6, Arterenol hydrochloride 361-09-1, Sodium cholate 363-24-6, Prostaglandin E2 463-40-1, Linolenic acid 481-39-0, Juglone 506-21-8, Linolelaidic acid 506-30-9, Arachidic acid 537-40-6, Trilinolein 551-11-1, Prostaglandin F2.alpha. 555-43-1, Tristearin 606-68-8 620-64-4, Triarachidin 745-65-3, Prostaglandin E1 863-57-0, Sodium glycocholate 987-65-5, Adenosine triphosphate disodium salt 1105-02-8, Corticosterone-21-sulfate 1184-16-3 1340-08-5, Vitamin P 1407-47-2, Angiotensin 1731-94-8, Nonadecanoic acid methyl ester 2566-90-7 2644-64-6, Dipalmitoylphosphatidylcholine 2752-99-0, Trierucin 3026-45-7, Dipalmitoylphosphatidylethanolamine 4537-76-2, Distearoylphosphatidylethanolamine 4537-77-3, Dipalmitoylphosphatidylglycerol 4537-78-4, Distearoylphosphatidylglycerol 4539-70-2, Distearoylphosphatidylcholine 4999-79-5, Estradiol-3-sulfate sodium salt 6064-90-0, Heneicosanoic acid methyl ester 6610-25-9, Arachidonic acid sodium salt 7235-40-7, .beta.-Carotene 7665-99-8, Cyclic GMP 9001-62-1, Lipase 9002-60-2, Adrenocorticotrophic hormone, biological studies 9002-60-2D, Adrenocorticotrophic hormone, 1-24 fragment 9002-64-6, Parathyroid hormone 9002-64-6D, Parathyroid hormone, 1-36 fragment 9002-67-9, Luteinizing hormone 9002-68-0, Follicle-stimulating hormone 9002-71-5, Thyrotropic hormone 9002-72-6, Somatotropin 9004-10-8, Insulin, biological studies 9004-61-9, Hyaluronic acid 9005-49-6, Heparin sulfate, biological studies 9007-12-9, Thyrocalcitonin

9007-92-5, Glucagon, biological studies 9015-73-0 9026-43-1, Protein kinase 9041-08-1, Heparin sodium salt 10417-94-4 10529-43-8, Cholecalciferol sulfate 11000-17-2, Vasopressin 11061-68-0, Human insulin 11128-99-7, Angiotensin II 12629-01-5, Human growth hormone 13487-42-8 13699-48-4, Dimyristoylphosphatidylcholine 14465-68-0 15866-84-9, Adenosine triphosphate calcium salt 18641-57-1, Tribehenin 20255-95-2, Dimyristoylphosphatidylethanolamine 20290-75-9 22251-85-0, Flavin mononucleotide sodium salt 24967-93-9, Chondroitin sulfate A 24967-94-0, Dermatan sulfate 25322-46-7, Chondroitin sulfate C 26536-13-0, Trinonadecanoin 27964-99-4, Poly-D-lysine hydrobromide 28845-86-5, 13,16,19-Docosatrienoic acid, (Z,Z,Z)- 28874-58-0 35121-78-9, Prostaglandin I2 37221-79-7, Vasoactive intestinal peptide 37377-93-8, .beta.-Lipotropin 37377-93-8D, .beta.-Lipotropin, fragment 37839-81-9, Cyclic AMP sodium salt 40245-60-1, Cyclic GMP sodium salt **41598-07-6**, Prostaglandin D2 52910-82-4, Aldosterone-21-hemisuccinate 55672-92-9, Coenzyme A sodium salt 59392-49-3, Gastric inhibitory peptide 60617-12-1, .beta.-Endorphin 60617-12-1D, .beta.-Endorphin, fragment 61361-72-6, Dimyristoylphosphatidylglycerol 61849-14-7, Prostaglandin I2 sodium salt 78392-27-5, Cholecalciferol sulfate sodium salt 80380-39-8, Tri-11-eicosenoin 85166-31-0, D-myo-Inositol-1,4,5-triphosphate 92216-45-0, D-myo-Inositol-2,4,5-triphosphate 96012-99-6, Guanosine triphosphate lithium salt 99660-95-4 100775-23-3, Corticosterone-21-sulfate potassium salt 108340-81-4, D-myo-Inositol, 1,4,5-tris(dihydrogen phosphate), hexasodium salt 135271-36-2, D-myo-Inositol-1,4,5-triphosphate potassium salt (bioactive agent-contg. biocomplex for correcting biol. information transfer and cell metab., and therapeutic use)

L36 ANSWER 2 OF 4 USPATFULL

AN 94:104598 USPATFULL

TI Method of synchronizing farrowing in swine

IN Hsu, Walter H., Ames, IA, United States

PA Iowa State University Research Foundation, Inc., Ames, IA, United States (U.S. corporation)

PI US 5369128 19941129

AI US 1993-80350 19930621 (8)

DT Utility

EXNAM Primary Examiner: Cintins, Marianne M.; Assistant Examiner: Weddington, K.

LREP Schwegman, Lundberg & Woessner

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a method of synchronizing farrowing in swine comprising the steps of administering an effective amount of a prostaglandin and then administering to the sows an effective amount of a peripheral .alpha..sub.2 adrenergic agonist, such that farrowing is induced.

SUMM Having experienced and skilled personnel available to assist during farrowing and the neonatal period is important for several reasons. When giving birth to large litters a sow will often tire. This results in the stillbirth of the last few pigs of the litter who are unable to escape the uterus and reach air before suffocating. Further, pigs are born without hair and, as such, are susceptible to temperature changes. Hypothermia can often cause the death of young pigs.

IT 4859-06-7, SKF 35886 **38562-01-5**, Dinoprost tromethamine

**40665-92-7**, Cloprostenol **40666-16-8**, Fluprostenol

52115-81-8, ST 1913 54120-61-5, Prostalene 69381-94-8, Fenprostalene

74176-31-1, Alfaprostol 134892-42-5, AGN 190851

(prostaglandin and .alpha.2-adrenergic agonist induction of parturition

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in swine)

L36 ANSWER 3 OF 4 USPATFULL

AN 89:80782 USPATFULL

TI Method and composition for safely delaying parturition and synchronizing farrowing in swine

IN Edgerton, Lee A., Lexington, KY, United States

Eckerle, Bruce T., Lexington, KY, United States

PA The University of Kentucky Research Foundation, Lexington, KY, United States (U.S. corporation)

PI US 4870066 19890926

AI US 1986-895785 19860811 (6)

DT Utility

EXNAM Primary Examiner: Shen, Cecilia

LREP King and Schickli

CLMN Number of Claims: 15

ECL Exemplary Claim: 1,7

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 501

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and composition are provided for extending the gestation period of a sow so as to increase the live birth and survival rates of a swine litter without adversely affecting the sow. The method includes the step of administering an effective dosage of estrogen to the sow 21/2-7 days prior to the end of the expected gestation period for the sow. The composition administered includes from 0.5-10 mg of an estrogen selected from a group consisting of estradiol benzoate, estradiol valerate, estrone, estradiol 17.beta. and effective mixtures thereof. The composition is adapted for administration parenterally by including a carrier such as corn oil. A method is also provided for synchronizing farrowing in a herd of swine bred following synchronized weaning so as to shorten the target period during which all the sows of the herd begin farrowing. This method involves the administration of a farrowing delaying composition including estrogen as an active ingredient in combination with the administration of an effective dosage of a farrowing inducing composition that may include a prostaglandin as the active ingredient.

SUMM Having experienced and skilled personnel available to assist during farrowing and the critical neonatal period is critical for several reasons. Often when giving birth to large litters a sow will tire. This can result in the stillbirth of the last few pigs of the litter who are unable to escape the uterus and reach the air before suffocating. Further, pigs are born virtually without hair and, as such, are very susceptible to temperature changes. Colder temperatures can often cause the death of young pigs.

IT 551-11-1

(sow farrowing response to estradiol benzoate and)

L36 ANSWER 4 OF 4 USPATFULL

AN 88:79095 USPATFULL

TI External pharmaceutical composition and methods of use

IN Makino, Yuji, Hino, Japan

Matugi, Hideo, Hino, Japan

Suzuki, Yoshiki, Hino, Japan

PA Teijin Limited, Tokyo, Japan (non-U.S. corporation)

PI US 4789667 19881206

AI US 1985-771764 19850903 (6)

PRAI JP 1984-182724 19840903

DT Utility

EXNAM Primary Examiner: Friedman, Stanley J.

LREP Wenderoth, Lind & Ponack

CLMN Number of Claims: 14

ECL Exemplary Claim: 14

KATHLEEN FULLER STIC LIBRARY 308-4290

DRWN No Drawings

LN.CNT 1443

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A pharmaceutical composition for external use with the enhanced penetration of a pharmacologically active agent through the skin or mucosa of a warm-blooded animal, said composition comprising

(A) a pharmaceutically effective amount of the pharmacologically active agent, and

(B) an optically active or inactive pyroglutamate of the following formula ##STR1## wherein R represents a linear, branched or cyclic alkyl or alkenyl group having 10 to 14 carbon atoms,

as a penetration enhancer.

DETD An ointment was prepared from 1 part of indomethacin, 10 parts of each of the various pyroglutamates shown in Table 1 (Examples 1 to 14), and 89 parts of a gel ointment base (composed of 1 part of Carbopol 934, 132 parts of propylene glycol, 30 parts of ethanol, 1 part of diisopropanolamine and 56 parts of water). The **hair** in the abdomen of each rat (body weight about 250 g) was removed by an electric **hair** clipper, and 100 mg of the resulting ointment was coated by a finger tip on a circular area having a diameter of 4 cm on the abdomen. After the lapse of a certain period of time, the blood was drawn from the tail portion of the rat, and the concentration of indomethacin in the blood was periodically determined by high performance liquid chromatography.

DETD An ointment was prepared from 1 part of nifedipine, 10 parts of each of the various pyroglutamates shown in Table 2 (Examples 15 to 28), and 89 parts of a gel ointment base (composed of 1 part of Carbopol 934, 12 parts of propylene glycol, 30 parts of ethanol, 1 part of diisopropanolamine and 56 parts of water). The **hair** in the abdomen of each rat (body weight about 250 g) was removed by an electric **hair** clipper, and 100 mg of the resulting ointment was coated by a finger tip on a circular area having a diameter of 4 cm on the abdomen. After the lapse of a certain period of time, the blood was drawn from the tail portion of the rat, and the concentration of nifedipine in the blood was periodically determined by high performance liquid chromatography.

DETD An ointment was prepared from 5 parts of isosorbide dinitrate, 10 parts of each of the various pyroglutamates shown in Table 3 (Examples 29 to 42), and 85 parts of a gel ointment base (composed of 1 part of Carbopol 934, 12 parts of propylene glycol, 30 parts of ethanol, 1 part of diisopropanolamine and 56 parts of water). The **hair** in the abdomen of each rat (body weight about 250 g) was removed by an electric **hair** clipper, and 100 mg of the resulting ointment was coated by a finger tip on a circular area having a diameter of 4 cm on the abdomen. After the lapse of a certain period of time, the blood was drawn from the tail portion of the rat, and the concentration of isosorbide dinitrate in the blood was periodically determined by high performance liquid chromatography.

DETD An ointment was prepared from 1 part of propranolol hydrochloride, 10 parts of each of the various pyroglutamates shown in Table 4 (Examples 15 to 28), and 89 parts of a gel ointment base (composed of 1 part of Carbopol 934, 12 parts of propylene glycol, 30 parts of ethanol, 1 part of diisopropanolamine and 56 parts of water). The **hair** in the abdomen of each rat (body weight about 250 g) was removed by an electric **hair** clipper, and 100 mg of the resulting ointment was coated by a finger tip on a circular area having a diameter of 4 cm on the abdomen. After the lapse of a certain period of time, the blood was drawn from the tail portion of the rat, and the concentration of nifedipine in the blood was periodically determined by high performance liquid chromatography (fluorescent detector).

IT 50-28-2, biological studies 50-53-3, biological studies 50-59-9

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51-21-8    51-34-3    53-86-1    58-71-9    59-46-1    69-72-7, biological  
studies    76-25-5    87-33-2    150-13-0    153-61-7    318-98-9    439-14-5  
**551-11-1**    555-30-6    2152-44-5    9004-10-8, biological studies  
9039-53-6    14556-46-8    15826-37-6    21829-25-4    36322-90-4  
60828-93-5  
(ointment contg. pyroglutamate as penetration enhancer and)

*Structures**of*  
*PGA, PGE**+ PGF**used**to draw*  
*structure for*  
*derivatives*  
*per claim 1*

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS

RN 551-11-1 REGISTRY

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,  
(5Z,9.alpha.,11.alpha.,13E,15S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-hydroxy-1-octenyl)cyclopentyl]-  
(8CI)

OTHER NAMES:

CN (+)-Prostaglandin F2.alpha.

CN 9.alpha.,11.alpha.-PGF2

CN Amoglandin

CN Cyclosin

CN Cyclosin (pharmaceutical)

CN Dinoprost

CN Enzaprost

CN Enzaprost F

CN Panacelan

CN **PGF2.alpha.**

CN Prostaglandin F2

CN Prostaglandin F2.alpha.

CN Prostarmon F

CN Prostine F 2 alpha

CN Protamodin

CN U 14583

FS STEREOSEARCH

DR 13535-33-6, 99437-94-2

MF C20 H34 O5

CI COM

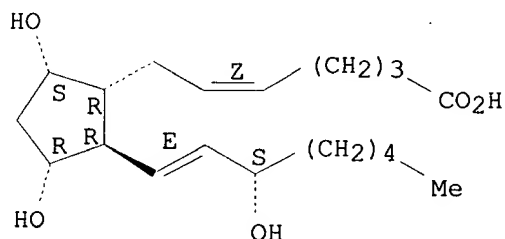
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CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,  
MEDLINE, MRCK\*, NAPRALERT, NIOSHTIC, PHAR, PROMT, RTECS\*, TOXLINE,  
TOXLIT, USAN, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.

Double bond geometry as shown.



12161 REFERENCES IN FILE CA (1967 TO DATE)

126 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

12171 REFERENCES IN FILE CAPLUS (1967 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=&gt; E PGA/CN

|    |       |             |
|----|-------|-------------|
| E1 | 1     | PG28485/CN  |
| E2 | 1     | PG28485W/CN |
| E3 | 5 --> | PGA/CN      |
| E4 | 1     | PGA 2470/CN |
| E5 | 1     | PGA 2473/CN |

&gt; S E7

L7

1 "PROSTAGLANDIN A1"/CN

=&gt; D SCAN

L7 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS

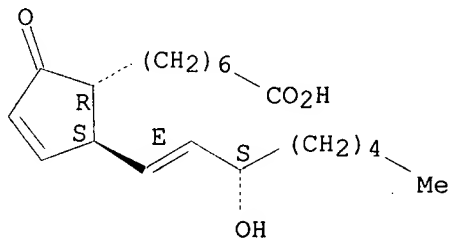
IN Prosta-10,13-dien-1-oic acid, 15-hydroxy-9-oxo-, (13E,15S)- (9CI)

MF C20 H32 O4

CI COM

Absolute stereochemistry.

Double bond geometry as shown.



=&gt; S E3

L8 1 "PROSTAGLANDIN A2"/CN

=&gt; D SCAN

L8 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS

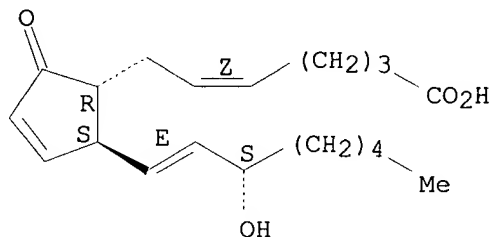
IN Prosta-5,10,13-trien-1-oic acid, 15-hydroxy-9-oxo-, (5Z,13E,15S)- (9CI)

MF C20 H30 O4

CI COM

Absolute stereochemistry.

Double bond geometry as shown.



ALL ANSWERS HAVE BEEN SCANNED

=&gt; E PROSTAGLANDIN A3/CN

E1 1 PROSTAGLANDIN A2, 15-METHYL-/CN

E2 1 PROSTAGLANDIN A2, 15-METHYL-, METHYL ESTER/CN

E3 1 --&gt; PROSTAGLANDIN A3/CN

E4 1 PROSTAGLANDIN B, 19-HYDROXY-/CN

E5 1 PROSTAGLANDIN B1/CN

E6 1 PROSTAGLANDIN B1 ETHYL ESTER/CN

E7 1 PROSTAGLANDIN B1 METHYL ESTER/CN

E8 1 PROSTAGLANDIN B1 METHYL ETHER/CN

E9 1 PROSTAGLANDIN B2/CN

E10 1 PROSTAGLANDIN B2 DIMER/CN

E11 1 PROSTAGLANDIN B2 HEPTAMER/CN

E12 1 PROSTAGLANDIN B2 HEXAMER/CN

=&gt; S E3

L9 1 "PROSTAGLANDIN A3"/CN

=&gt; D SCAN

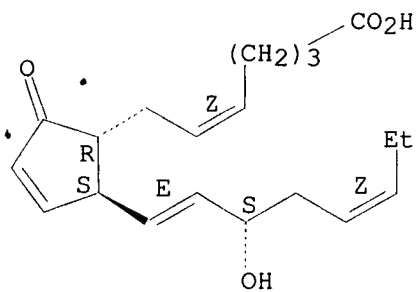
L9 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS

IN Prosta-5,10,13,17-tetraen-1-oic acid, 15-hydroxy-9-oxo-, (5Z,13E,15S,17Z)- (9CI)

MF C20 H28 O4

Absolute stereochemistry.

Double bond geometry as shown.



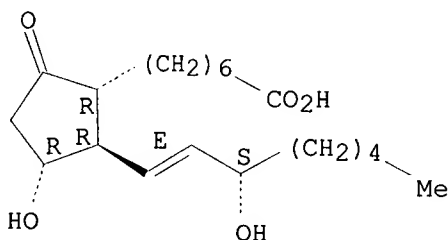
ALL ANSWERS HAVE BEEN SCANNED

S E12  
L11 1 "PROSTAGLANDIN E1"/CN

=> D SCAN

L11 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS  
IN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)- (9CI)  
MF C20 H34 O5  
CI COM

Absolute stereochemistry.  
Double bond geometry as shown.



ALL ANSWERS HAVE BEEN SCANNED

=> E PROSTAGLANDIN E2/CN  
E1 1 PROSTAGLANDIN E1-OXIME/CN  
E2 1 PROSTAGLANDIN E1.ALPHA./CN  
E3 1 --> PROSTAGLANDIN E2/CN  
E4 1 PROSTAGLANDIN E2 1,15-LACTONE 11-ACETATE/CN  
E5 1 PROSTAGLANDIN E2 15-ACETATE/CN  
E6 1 PROSTAGLANDIN E2 15-METHYL ETHER/CN  
E7 1 PROSTAGLANDIN E2 15-METHYL ETHER, METHYL ESTER/CN  
E8 1 PROSTAGLANDIN E2 15-METHYL ETHER, SODIUM SALT/CN  
E9 1 PROSTAGLANDIN E2 2,4-DIMETHOXYANILIDE/CN  
E10 1 PROSTAGLANDIN E2 5-INDANYL ESTER/CN  
E11 1 PROSTAGLANDIN E2 9-KETO REDUCTASE/CN  
E12 1 PROSTAGLANDIN E2 9-REDUCTASE/CN

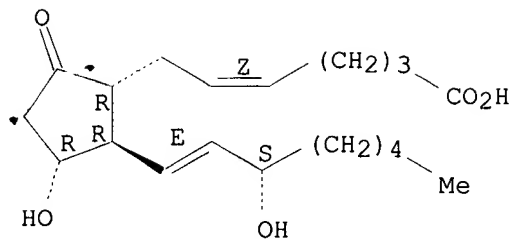
=> S E3  
L12 1 "PROSTAGLANDIN E2"/CN

=> D SCAN

L12 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS  
IN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,  
(5Z,11.alpha.,13E,15S)- (9CI)  
MF C20 H32 O5  
CI COM

Absolute stereochemistry.  
Double bond geometry as shown.





ALL ANSWERS HAVE BEEN SCANNED

=> E PROSTAGLANDIN E3/CN

|     |       |  |
|-----|-------|--|
| E1  | 1     | PROSTAGLANDIN E2..BETA.-CYCLODEXTRIN CLATHRATE COMPD./CN |
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| E3  | 1 --> | PROSTAGLANDIN E3/CN                                      |
| E4  | 1     | PROSTAGLANDIN E3 1,15-LACTONE/CN                         |
| E5  | 1     | PROSTAGLANDIN E3 1,15-LACTONE 11-ACETATE/CN              |
| E6  | 1     | PROSTAGLANDIN E3 P-BROMOPHENACYL ESTER/CN                |
| E7  | 1     | PROSTAGLANDIN ENDOPEROXIDE CONVERTASE/CN                 |
| E8  | 1     | PROSTAGLANDIN ENDOPEROXIDE D-ISOMERASE/CN                |
| E9  | 1     | PROSTAGLANDIN ENDOPEROXIDE E ISOMERASE/CN                |
| E10 | 1     | PROSTAGLANDIN ENDOPEROXIDE E2 ISOMERASE/CN               |
| E11 | 1     | PROSTAGLANDIN ENDOPEROXIDE G/H SYNTHASE/CN               |
| E12 | 1     | PROSTAGLANDIN ENDOPEROXIDE H SYNTHASE/CN                 |

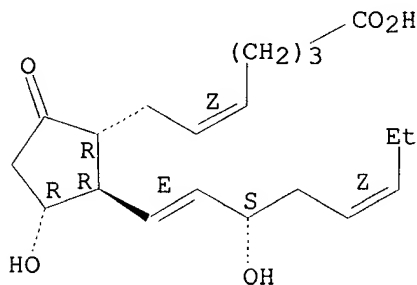
=> S E3

L13 1 "PROSTAGLANDIN E3"/CN

=> D SCAN

L13 1 ANSWERS REGISTRY COPYRIGHT 1999 ACS  
 IN Prosta-5,13,17-trien-1-oic acid, 11,15-dihydroxy-9-oxo-,  
 (5Z,11.alpha.,13E,15S,17Z)- (9CI)  
 MF C20 H30 O5  
 CI COM

Absolute stereochemistry.  
 Double bond geometry as shown.



ALL ANSWERS HAVE BEEN SCANNED